



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/772,393

02/06/2004

Jin-Won Kim

P56929

5028

7590
Robert E. Bushnell
Suite 300
1522 K Street, N.W.
Washington, DC 20005

10/12/2007

EXAMINER

TIV, BACKHEAN

ART UNIT

PAPER NUMBER

2151

MAIL DATE

DELIVERY MODE

10/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/772,393

Applicant(s)

KIM, JIN-WON

Examiner

Backhean Tiv

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/6/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/04 7/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Detailed Action

Claims 1-16 are pending in this application.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 2/6/04, 7/29/04 has been considered

Drawings

The Drawings filed on 2/6/04 are acceptable.

Claim Objections

Applicant is advised that should claim 13 be found allowable, claim 14 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 1-16 are objected to because of the following informalities:

As per claims 1-16, it is recommended that the applicant delete PADI, PADT, PADO and use PPPoE Active Discovery Initiation, PPPoE Discovery Terminate, PPPoE Active Discovery Offer.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6-9,11-14,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2004/0052263 issued to Xu in view of *A Method of Transmitting PPP Over Ethernet*, RFC 1516, Mamkos et al.(Mamkos), Feb.1999 in further view of US Publication 2003/0012198 issued to Kaganoi et al.(Kaganoi).

As per claim 1. Xu teaches a PPPoE (Point-to-Point Protocol over Ethernet) network system, comprising: a client connected to a server through an Ethernet line(para.0009); said client transmitting a PADI (PPPoE Active Discovery Initiation) packet to said server if said client becomes disconnected from said server in a manner other than by transmission of PADT (PPPoE Active Discovery Terminate) packets between said client and said server(para.0061); packet received from said server, following the transmission of said PADI (PPPoE Active Discovery Initiation) packet, packet received from said server was a PADO (PPPoE Active Discovery Offer) packet(para. 0065); checking for a server transmitted PADT (PPPoE Active Discovery Terminate) packet in response thereto(para.0062); and said client transmitting a new PADI (PPPoE Active Discovery Initiation packet to said server to reconnect said server

Art Unit: 2151

and said client, when said client receives the server transmitted PADT (PPPoE Active Discovery Terminate) packet(para.0062).

Xu however does not explicitly teach extracting a session-ID and loading it into a PPPoE Active Discovery Terminate packet and transmitting the PPPoE Active Discovery Terminate packet to the server.

Mamakos teaches extracting a session-ID and loading it into a PPPoE Active Discovery Terminate packet and transmitting the PPPoE Active Discovery Terminate packet to the server(page 5, section 5.5).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Xu to include extracting a session-ID and loading it into a PPPoE Active Discovery Terminate packet and transmitting the PPPoE Active Discovery Terminate packet to the server as taught by Mamakos in order to terminate a PPPoE session.

One ordinary skill in the art would have been motivated to combine the teachings of Xu and Mamakos in order to terminate a PPPoE session.

Xu in view of Mamakos does not explicitly determine and/or check to what types of packets are being received.

Kaganoi teaches determine and/or check to what types of packets are being received(para.0047).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Xu in view of Mamakos to include determination

Art Unit: 2151

of different types of packets as taught by Kaganoi in order to determine what types of packets are being received.

One ordinary skill in the art would have been motivated to combine the teachings of Xu, Mamakos, and Kaganoi in order to determine what types of packets are being received.

As per claim 2, the system as set forth in claim 1, wherein said client checks a value of a Code field in said packet received from said server, when checking whether the packet received from said server is the PADO (PPPoE Active Discovery Offer) packet(Kaganoi, para.0047). Motivation to combine set forth in claim 1.

As per claim 3, the system as set forth in claim 1, further comprising: said client transmitting a PADR (PPPoE Active Discovery Request) packet to said server when the client determines that the packet received from said server is the PADO (PPPoE Active Discovery Offer) packet and checking for a server transmitted PADS (PPPoE Active Discovery Session-confirmation) packet in response thereto; and said client and said server beginning a PPP (Point-to-Point Protocol) session stage when the client receives the server transmitted PADS (PPPoE Active Discovery Session-confirmation) packet(Mamakos, section 5.3-5.4). Motivation to combine set forth in claim 1.

As per claim 4, the system as set forth in claim 3, wherein said client checks a value of a Code field in said packet received from said server, when checking whether the packet received from said server is the PADO (PPPoE Active Discovery Offer) packet(Kaganoi, para.0047). Motivation to combine set forth in claim 1.

As per claim 13, the method as set forth in claim 11, said step of checking the Code field checks for a predetermined value of 0x07 in said Code field(Xu, para.0062).

As per claim 14, the method as set forth in claim 12, said step of checking the Code field checks for a predetermined value of 0x07 in said Code field(Xu, para.0062).

As per claim 16, the method as set forth in claim 11, wherein said abnormal manner is any manner other than by transmission of respective discovery stage terminate packets between said client and said server(Xu, para.0060).

As per claims 6-9, 11,12,do not teach or further define over the limitations in claims 1-4. Therefore claims 6-9, 11, 12 are rejected for the same reasons set forth above.

Claims 5,10,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2004/0052263 issued to Xu in view of *A Method of Transmitting PPP Over Ethernet*, RFC 1516, Mamkos et al.(Mamkos), Feb.1999 in further view of US Publication 2003/0012198 issued to Kaganoi et al.(Kaganoi) in further view of US Publication 2003/0182434 issued to Ogushi et al.(Ogushi).

Xu in view of Mamkos in further view of Kaganoi does not explicitly teach as per claim 5, the system as set forth in claim 1, further comprising:
said client also extracting a client MAC (Media Access Control) address from said packet received from said server and storing the client MAC (Media Access Control) address; and said client loading said client MAC (Media Access Control) address of the PADT (PPPoE Active Discovery Terminate) packet being transmitted to said server.

Xu in view of Mamkos in further view of Kaganoi however, does teach extracting session-ID and using the ID in the PADT packet for termination of a session(Mamkos, 5.5) and determining different types of packets(Kaganoi, para.0047)

Ogushi teaches the extraction of a MAC address from a data packet from a server and loading that information into another packet(para.0024-0026). It is obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Ogushi from extraction of a MAC address from a data packet from a server and loading that information into another packet to instead extract a client MAC address from a data packet and loading the information into a PADT packet.

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Xu in view of Mamkos in further view of Kaganoi to include extracting a MAC address from a data packet and loading that information into another packet as taught by Ogushi in order provide a system that can distribute connection requests from clients to servers.

One ordinary skill in the art would have been motivated to combine the teachings of Xu, Mamkos, Kaganoi, Ogushi in order to provide a system that can distribute connection requests from clients to servers..

As per claims 10,15, do not teach or further define over the limitations in claims 5. Therefore claims 10,15 are rejected for the same reasons set forth above.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Art Unit: 2151

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571) 272-5654. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2151

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



BackheanTiv
2151
9/31/07



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100